Claims

1. A surgical device (1) apt to the removal of bone, cartilaginous and the like tissues during surgery, comprising:

- a pair of side-by-side blades (3, 4), slidably coupled so that respective distal ends (31, 41) thereof be closable the one against the other for the removal of a tissue fragment (O);
- propelling means (6), connected or connectible to a blade (3) of said pair (3, 4) and apt to determine the sliding thereof with respect to the other (4) of said blades; and
- operation means (11) for the operation of said propelling means (6) by a user.

2. The device (1) according to claim 1, wherein said slidable blade (3) of said pair (3, 4) is removably connected or connectible to said propelling means (6).

3. The device (1) according to claim 1 or 2, wherein the arrangement is such that said slidable blade (3) of said pair (3, 4) automatically returns to a resting position when the user releases said operation means (11).

4. The device (1) according to any one of the preceding claims, wherein the arrangement is such that the blades (3, 4) of said pair can rotate with respect to said operation means (11), during surgery, about an axis of rotation (X) substantially parallel to the blades themselves.

5. The device (1) according to any one of the preceding claims, wherein said operation means comprises a trigger device (11).

6. The device (1) according to any one of the preceding claims, comprising a main body (2) apt to be handled by a user and connected or connectible to said pair of blades (3, 4).

7. The device (1) according to the preceding claim, wherein said operation means (11) are located at said main body (2).

8. The device (1) according to the preceding claim, wherein said main body (2) comprises a portion (20) apt to be handled by a user by a single hand, and wherein said operation means (11) are located at said portion (20).

9. The device (1) according to any one of the claims 6 to 8, wherein said propelling means (6) is received within said main body (2).

10. The device (1) according to any one of the claims 6 to 9, wherein the blades (3, 4) of said pair are removably connected or connectible to said main body (2).

11. The device (1) according to any one of the preceding claims, wherein said propelling means (6) are of a pneumatic type.

12. The device (1) according to the preceding claim, wherein said propelling means (6) comprises a piston (7) apt to produce the sliding of said slidable blade (3) of said pair of blades (3, 4).

13. The device (1) according to the preceding claim, wherein said piston (7) is coupled to said slidable blade (3) of said pair of blades (3, 4) by interposition of a motion transmission member (8).

14. The device (1) according to the preceding claim, wherein said motion transmission member (8) is a lever rotatably connected at opposed ends thereof to said slidable blade (3) of said pair of blades (3, 4) and to the stem (71) of said piston (7), respectively, and moreover rotatably connected to a chassis (2) of the device (1) at a central portion thereof.

15. The device (1) according to any one of the claims 11 a 14, wherein said propelling means (6) comprises a supply valve (10) of a or of said pneumatic piston (7) and said operation means (11) cooperates with said supply valve (10).

16. The device (1) according to any one of the claims 11 a 15, wherein said propelling means (6) comprises an intake (9) for supplying compressed air from the outside.

17. The device (1) according to any one of the preceding claims, comprising means (R) for adjusting the closing force of the blades (3, 4).

18. The device (1) according to any one of the preceding claims, comprising means (11, 16) for adjusting the relative sliding speed of the blades (3, 4) of said pair.

19. The device (1) according to the preceding claim when dependent from any one of the claims 11 to 16, wherein said means for adjusting the sliding speed comprises flow adjusting means (16).

20. The device (1) according to claim 18 o 19, wherein said operation means (11) are such that the relative sliding speed of the blades (3, 4) of said pair depends on the user's speed of handling the operation means themselves.

21. The device (1) according to any one of the preceding claims, comprising

means (17) for inhibiting operation of said propelling means (6).

22. The device (1) according to any one of the preceding claims, comprising means (5) for preventing bone fragment entrapment between the blades (3, 4) of said pair.

23. The device (1) according to any one of the preceding claims, comprising means for cooperating with a neuro-navigation system.

24. A surgery kit, comprising a surgical device (1) according to any one of the preceding claims and a plurality of osteotomy blades (3, 4) removably connectible to said propelling means (6).

25. The kit according to the preceding claim, comprising means (9) for connection with pneumatic supply means.

26. A surgery apparatus, comprising a surgical device (1) according to any one of the claims 1 to 23 and a neuro-navigation system associated thereto.